REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 12-27 are presently pending in this application, Claims 12-17 having been amended and Claims 18-27 having been newly added by the present amendment.

In the outstanding Office Action, Claims 12 and 13 were rejected under 35 U.S.C. §102(b) as being anticipated by Arena et al. (U.S. Patent 5,635,093); and Claims 14-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Arena et al. in view of Ushikoshi et al. (U.S. Patent 5,306,895) or Hecht et al. (U.S. Patent 5,877,475).

Claims 12-17 have been amended and Claims 18-27 have been newly added herein. These amendments and additions in the claims find clear support in the specification, claims and drawings as originally filed. For example, Claim 12 is believed to be supported by page 29, line 23, to page 30, line 17, as well as Figures 4 and 5; Claim 15 by page 29, lines 23-27; Claims 18 and 20 by page 8, lines 14-25; Claim 19 by page 7, lines 26-31; Claims 21-26 by page 29, line 23, to page 30, line 17, as well as Figures 4 and 5; and Claim 27 similar to amended Claim 12. Claims 13, 14, 16 and 17 are amended solely for clarity. Hence, no new matter is believed to be added thereby.

Before addressing the outstanding rejections, a brief summary of Claim 12 as currently amended is believed to be helpful. Amended Claim 12 is directed to a ceramic heater which includes: a ceramic plate having a heating surface configured to face a semiconductor wafer and a bottom surface on an opposite side of the heating surface, the ceramic plate having at least one bottomed hole extending from the bottom surface toward the heating surface; a heating element formed on the bottom surface of the ceramic plate or inside thereof; a temperature-measuring device configured to measure a temperature and

position in the at least one bottomed hole; a fixing device detachably fixing the temperature-measuring device in a bottom portion of the at least one bottomed hole by continuously pressing the temperature-measuring device against the bottom portion; a control unit for supplying electric power to the heating element; a memory unit for memorizing a temperature data based on the temperature measured by the temperature-measuring device; and an operation unit for calculating electric power required for the heating element from the temperature data. The bottom portion of the bottomed hole is formed closer to the heating surface than the heating element. By providing such a fixing device, the temperature-measuring device is more securely positioned in the bottomed hole compared with a fixing material such as a resin and a solder material,[1] while still allowing to be easily replaced if necessary.

The outstanding Office Action asserts that Hecht et al. discloses "a sheath thermocouple that is pressed on the bottom surface of the ceramic heater with an elastic body such as a spring and also with an insulator." However, Applicants respectfully submit that Hecht et al. does not teach or suggest "a fixing device detachably fixing the temperature-measuring device in a bottom portion of the at least one bottomed hole by continuously pressing the temperature-measuring device against the bottom portion" as recited in amended Claim 12. On the other hand, Hecht et al. discloses a thermally retractable inner sleeve 16 supported by a thermo-bimetal spring 18, and according to Hecht et al., the temperature sensor 12 simply "bears in punctiform contact against the underside of the glass ceramic plate ... only under the influence of temperature."[2] That is, "in the cold condition of ... the glass ceramic plate 3 the inner sleeve 16 is disposed at an axial spacing relative to the underside of the glass ceramic plate" while "[i]n the hot operative condition of the glass ceramic plate 3

[1] See Specification, page 10, lines 17-22.
[2] Hecht et al., column 4, lines 13-40.

the inner sleeve 16 is pressed against the underside of the glass ceramic plate 3 by the bimetal spring 18."[3] As such, the temperature sensor 12 of Hecht et al. is not continuously pressed against the glass ceramic plate 3 such that it is securely fixed thereto. Therefore, the structure recited in Claim 12 is believed to be patentably distinguishable from Hecht et al.

Arena et al. and Ushikoshi et al. disclose a heating plate and a ceramic heating device, respectively However, neither Arena et al. nor Ushikoshi et al. teaches or suggests "a fixing device detachably fixing the temperature-measuring device in a bottom portion of the at least one bottomed hole by continuously pressing the temperature-measuring device against the bottom portion" as recited in amended Claim 12. More specifically, Arena et al. merely shows a heating plate device having a regulating means, current supply means, a processing means and a comparison means, and Ushikoshi et al. only shows a sheathed thermocouple. The structure recited in Claim 12 is thus clearly distinguishable from Arena et al. and Ushikoshi et al.

Because none of Hecht et al., Arena et al. and Ushikoshi et al. discloses the fixing device as recited in amended Claim 12, even the combined teachings of these cited references are not believed to render the structure recited in Claim 1 obvious.

Likewise, Claim 27 includes subject matter substantially similar to what is recited in amended Claim 12 to the extent discussed above. Thus, Claim 27 is also believed to be distinguishable from Hecht et al., Arena et al. and Ushikoshi et al.

For the foregoing reasons, Claims 12 and 27 are believed to be allowable. Furthermore, since Claims 13-26 ultimately depend from Claim 12, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 13-26 are believed to be allowable as well.

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[3] Hecht et al., column 4, lines 19-28.

Additionally, Applicants respectfully request that the Supplemental Application Data Sheet filed November 26, 2003, for correcting a typographic error in the first inventor's name, be duly entered.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is believed to be in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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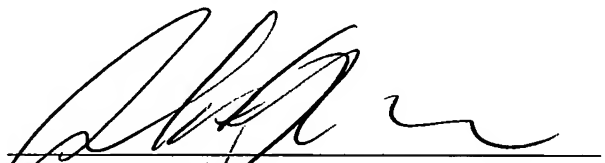

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